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Oceans and the law of the sea

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Report of the Secretary-General**

Addendum

Summary

The present report, which covers the period from 1 September 2014 to 31 August 2015, is submitted pursuant to paragraph 309 of General Assembly resolution 69/245, in which the Assembly requested the Secretary-General to prepare a comprehensive report on developments and issues relating to ocean affairs and the law of the sea, including the implementation of resolution 69/245, for consideration at its seventieth session. It is also being submitted to States parties to the United Nations Convention on the Law of the Sea, pursuant to article 319 of the Convention. The report provides information on the status of the Convention and its implementing agreements and the work of the bodies established under the Convention; settlement of disputes; State practice regarding maritime space; international shipping activities; people at sea; maritime security; the 2030 Agenda for Sustainable Development; marine science and the Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socioeconomic Aspects; marine living resources; marine biological diversity; pressures on the marine environment; management tools; oceans and climate change and ocean acidification; small island developing States and landlocked developing countries; capacity-building and international cooperation and coordination.

* A/70/150.

** Owing to the page limit, the report contains a summary of the most important recent developments and selected parts of contributions by relevant agencies, programmes and bodies.

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Contents

		Page
I.	Introduction	3
II.	Status of the United Nations Convention on the Law of the Sea and its implementing agreements, work of the bodies established under the Convention and peaceful settlement of disputes	3
III.	Maritime spaces	6
IV.	Developments relating to international shipping activities	7
V.	People at sea	9
VI.	Maritime security	11
VII.	Sustainable development of oceans and seas	14
VIII.	Oceans and climate change and ocean acidification	29
IX.	Supporting small island developing States and landlocked developing countries	31
X.	Building the capacity of States to implement the legal regime for the oceans and seas	32
XI.	Strengthening international cooperation and coordination	34
XII.	Conclusions	36

I. Introduction

1. The present report has been prepared immediately prior to the adoption of a new development agenda entitled: "Transforming our world: the 2030 agenda for sustainable development".[1] That agenda is based, inter alia, on 17 sustainable development goals and their associated targets, including goal 14, Conserve and sustainably use the oceans, seas and marine resources for sustainable development. It recognizes that social and economic development depends on the sustainable management of the planet's natural resources, including oceans and seas.

2. The present report highlights activities, including the adoption of measures and the development of programmes, undertaken by the United Nations system and other intergovernmental organizations in relation to General Assembly resolution 69/245. It also provides an overview of the main developments and issues with regard to ocean affairs and the law of the sea. Its purpose is to assist the General Assembly in its annual consideration and review of those and other developments. The report should be read in conjunction with: (a) the report of the Secretary-General on oceans and the law of the sea (A/70/74), which addresses the topic of focus of the sixteenth meeting of the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea (the Informal Consultative Process); (b) the report on the work of the Informal Consultative Process at its sixteenth meeting (A/70/78); (c) a letter dated 13 February 2015 from the Co-Chairs of the Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction (the BBNJ Working Group) to the President of the General Assembly (A/69/780); (d) the report of the twenty-fifth Meeting of States Parties to the United Nations Convention on the Law of the Sea (SPLOS/287); (e) a letter dated 7 July 2015 from the Co-Chairs of the Ad Hoc Working Group of the Whole on the Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socioeconomic Aspects addressed to the President of the General Assembly (A/70/112); and other relevant documents, such as the statements by the Chair of the Commission on the Limits of the Continental Shelf on progress of work in the Commission (CLCS/85, 86 and 88).

3. The report should also be read in conjunction with the more detailed contributions provided by the United Nations specialized agencies, programmes and bodies, as well as other intergovernmental organizations,[2] for which the Secretary-General expresses his gratitude.

II. Status of the United Nations Convention on the Law of the Sea and its implementing agreements, work of the bodies established under the Convention and peaceful settlement of disputes

4. As reaffirmed by the General Assembly, the 1982 United Nations Convention on the Law of the Sea (the Convention) sets out the legal framework within which

[1] See A/69/L.85.

[2] All the contributions are available on the website of the Division for Ocean Affairs and the Law of the Sea at www.un.org/Depts/los/general_assembly/contributions70.htm.

all activities in the oceans and seas must be carried out and is of strategic importance as the basis for national, regional and global action and cooperation in the marine sector.

5. As at 31 August 2015, the number of parties to the Convention had risen to 167, those to the 1994 Agreement relating to the Implementation of Part XI of the Convention to 147 and those to the 1995 Agreement for the Implementation of the Provisions of the Convention relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (the United Nations Fish Stocks Agreement) to 82, bringing those instruments closer to the goal of universal participation called for by the General Assembly.[3]

6. The General Assembly has repeatedly called upon States to ensure that any declarations or statements that they made or make when signing, ratifying or acceding to the Convention do not purport to exclude or modify the legal effect of the provisions of the Convention, and to withdraw any such declarations or statements.[4] So far, no such declaration or statement has been withdrawn.[5]

A. Work of the bodies established under the Convention

7. The bodies established under the Convention have continued to facilitate its implementation, as recognized and called for by the General Assembly. The report of the twenty-fifth Meeting of States Parties to the Convention, held in June 2015, is contained in document SPLOS/287 (see also para. 14 below).

8. *International Seabed Authority*. As a result of growing interest in minerals of the deep seabed, as at 31 August 2015, 27 plans of work for exploration in the Area have been approved by the Authority, contributing to a further increase in its workload with respect to contracts administration and supervision.[6] At its twenty-first session, in July 2015, the Authority continued its work on a draft framework for the regulation of the exploitation of the Area, for which the Council of the Authority adopted a list of priority deliverables. The Council also adopted a decision relating to the procedures and criteria for the extension of an approved plan of work for exploration.[7] With the first seven contracts approved by the Authority due to expire between March 2016 and March 2017, that decision also expanded on the requirements to be met by contractors at the time of application for extensions, as well as transitional measures pending approval by the Council. At the same session, the Assembly adopted a decision regarding the first periodic review of the international regime of the Area pursuant to article 154 of the Convention, and the terms of reference for that review.[8]

9. In March 2015, the Authority and the International Cable Protection Committee held a workshop to address the potential for interaction between the laying of submarine cables and exploration for and exploitation of the resources of the Area, with a view to ensuring that activities in areas beyond national jurisdiction

[3] See https://treaties.un.org. The European Union is party to all three instruments.
[4] A/59/62, sect. II.B, paras. 12-13.
[5] See https://treaties.un.org.
[6] International Seabed Authority (ISBA) contribution.
[7] ISBA/21/C/19.
[8] ISBA/21/A/9. For other activities of the Authority, see para. 67 below.

are carried out in accordance with the "due regard" obligations contained in the Convention.[9] The workshop suggested that the Authority and the Committee could facilitate communication between contractors and cable owners.[10]

10. *International Tribunal for the Law of the Sea*. In April 2015, the Tribunal delivered its advisory opinion in the *Request for an advisory opinion submitted by the Sub-Regional Fisheries Commission* and a special chamber of the Tribunal prescribed provisional measures in the *Dispute concerning Delimitation of the Maritime Boundary between Ghana and Côte d'Ivoire in the Atlantic Ocean*.[11] In July 2015, Italy submitted a request to the Tribunal for the prescription of provisional measures under article 290, paragraph 5, of the Convention in a dispute with India over the incident involving the *M/V Enrica Lexie*.[12] During the reporting period, the Tribunal also continued to deliver its capacity-building and training programme on dispute settlement under the Convention.[13]

11. *Commission on the Limits of the Continental Shelf*. During the reporting period, the Commission met[14] and adopted two sets of recommendations, bringing the total number of recommendations to 22. So far, however, there have only been a limited number of deposits of information and data permanently describing the outer limits of the continental shelf on the basis of the recommendations of the Commission, pursuant to article 76, paragraph 9, of the Convention,[15] a situation which has implications also for the delineation of the limits of the Area.

12. As at 31 August 2015, four new submissions, two revised submissions and an amended submission had been made, bringing the total number of submissions to 81, including revised submissions.

13. Consequently, the workload and backlog of the Commission[16] continued to increase. The time between the receipt of a submission and the establishment of a subcommission to consider it has surpassed six years and is expected to further increase.[17] This poses practical challenges for submitting States, which have to maintain the required data, software and expertise.

14. The twenty-fifth Meeting of States Parties adopted a decision regarding the conditions of service of the members of the Commission (SPLOS/286),[18] which are interrelated with the growing workload of the Commission and the increasing demands on its members. The Meeting urged the General Assembly to take appropriate and necessary measures to resolve the matter of working space and to take any necessary measures with a view to providing medical insurance coverage

[9] See arts. 87 and 147 of the Convention.

[10] *Submarine Cables and Deep Seabed Mining. Advancing Common Interests and Addressing UNCLOS "Due Regard" Obligations* (2015). ISBA Technical Study No. 14.

[11] International Tribunal for the Law of the Sea contribution.

[12] www.itlos.org/cases/list-of-cases.

[13] International Tribunal for the Law of the Sea contribution.

[14] See CLCS/85, CLCS/86 and CLCS/88.

[15] Mexico in respect of the western polygon in the Gulf of Mexico (2009), Ireland in the area abutting the Porcupine Abyssal Plain (2009), the Philippines in the Benham Rise Region (2012) and Australia (2012).

[16] As at 31 August 2015, the number of submissions not yet under active consideration by the Commission stood at 49.

[17] For information on the dates of deposit of submissions and the establishment of subcommissions to consider them, see www.un.org/depts/los/clcs_new/commission_submissions.htm.

[18] See CLCS/88.

to Commission members from developing States, and decided to continue the consideration of other conditions of service of the members of the Commission. The twenty-fifth Meeting also elected Nenad Leder (Croatia) to fill a vacancy which had arisen in the Commission.

B. Peaceful settlement of disputes

15. As recognized by the General Assembly, the Convention contributes to the maintenance of peace and the strengthening of security, including by providing compulsory procedures entailing binding decisions. During the reporting period, in addition to the work carried out by the Tribunal[19] (see para. 10 above), there were five cases relating to law of the sea issues before the International Court of Justice, which rendered orders in two cases and held public hearings in another case,[20] while the arbitral tribunals established under annex VII to the Convention rendered a number of orders and the award in the *Chagos Marine Protected Area Arbitration (Mauritius v United Kingdom)*.[21]

III. Maritime spaces

16. Under the Convention, the Secretary-General is entrusted with depository and due publicity functions to facilitate awareness of the limits of the maritime zones in which coastal States exercise sovereignty or sovereign rights and jurisdiction. To that end, the Division for Ocean Affairs and the Law of the Sea of the Office of Legal Affairs (the Division), as mandated by the General Assembly, maintains facilities for the deposit by States of charts and geographical coordinates concerning maritime zones, including lines of delimitation, and gives due publicity thereto. The Division makes information on State practice available on its website, in an extensive database containing texts of national legislation on maritime zones, maritime boundary delimitation treaties and related communications.[22] It gives publicity to the deposit of charts and geographical coordinates and other developments, including through Maritime Zone Notifications and the *Law of the Sea Bulletins*.[23]

17. During the reporting period, a number of States deposited, pursuant to the Convention, charts or lists of geographical coordinates of points with the Secretary-General. Many coastal States, however, have yet to meet their deposit and due-publicity obligations.

18. The Division continued to contribute, in collaboration with the International Hydrographic Organization (IHO) and other relevant organizations, to the ongoing development of product specifications for the collection, storage and dissemination of the deposited information, in order to ensure compatibility among geographic information systems, electronic nautical charts and other systems developed by

[19] International Tribunal for the Law of the Sea contribution and www.itlos.org/index.php?id=35.

[20] International Court of Justice contribution and www.icj-cij.org/docket/index.php?p1=3&p2=2.

[21] Permanent Court of Arbitration contribution and www.pca-cpa.org/showpage95e7.html?pag_id=1288.

[22] See www.un.org/Depts/los/LEGISLATIONANDTREATIES/index.htm.

[23] See www.un.org/Depts/los/doalos_publications/los_bult.htm. Deposits were made by, in chronological order, Saint Vincent and the Grenadines, France, Niue, Kiribati, Yemen, Fiji and Brazil.

those organizations.[24] In addition, the product specifications will assist States parties in preparing their data in a standardized manner when fulfilling their deposit obligations under the Convention.

19. The Division utilized the latest version of the product specifications for the maintenance of its geographic information system and the completion of the development of an associated geo-web portal, Oceans Lexplorer. The geo-web portal is intended to give publicity via the Internet to the deposited information on baselines and outer limits of maritime zones, in the form of an illustrative interactive map and a list of geographic coordinates of points available for download. Prior to making the geo-web portal available online, the Division intends to send communications to all States parties that made deposits, with a view to seeking confirmation that the information to be made accessible through that portal corresponds to the information deposited.

IV. Developments relating to international shipping activities

20. International shipping, which is responsible for the carriage of approximately 90 per cent of world trade, is vital to the global economy.[25] The industry remains highly vulnerable to fluctuations in the global economy and has suffered recent downturns in growth in world seaborne shipments and in the world shipping fleet, freight rates and port throughput volumes.[26] It also remains vulnerable to threats to maritime security (see sect. VI below).

21. The General Assembly has highlighted the need to improve maritime safety, including through the adoption and entry into force of legal instruments and other measures.[27] It also continues to monitor developments relating to maritime safety, in particular with regard to hydrographic surveying and nautical charting, navigation, seafarers (see paras. 29-31 below) and flag State implementation.

22. As recognized by the General Assembly, hydrographic surveying and nautical charting, and the work of IHO in that regard, are critical, including for international shipping.[28] The coverage of Electronic Navigational Charts is approaching that of paper charts; however, greater coverage is being hindered by the lack of reliable survey data and appropriate prioritization and funding, particularly in polar regions.[29] IHO has continued to support its member States to achieve an adequate coverage of nautical charts and contribute to the development of maritime spatial data infrastructures, including through capacity-building.[30] The International Maritime Organization (IMO) approved a strategy to fully implement e-navigation.[31] The

[24] A report on the latest developments in the product specification is expected to be made at the 7th meeting of the IHO Hydrographic Services and Standards Committee, to be held in Busan, Republic of Korea, from 9 to 13 November 2015; see www.iho.int/mtg_docs/com_wg/HSSC/HSSC7/HSSC7Docs.htm.

[25] See www.ics-shipping.org/shipping-facts/key-facts.

[26] UNCTAD, *Review of Maritime Transport 2014*. Also, see UNCTAD contribution.

[27] Resolution 69/245, paras. 89 and 108.

[28] Resolution 69/245, preamble and paras. 14 and 136.

[29] IHO contribution.

[30] Ibid.

[31] IMO contribution.

International Mobile Satellite Organization (IMSO) also focused on that strategy and on implementation of the Global Maritime Distress and Safety System.[32]

23. Recent legal instruments adopted by IMO to improve maritime safety include the revised International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk,[33] which will enter into force on 1 January 2016; and the International Code of Safety for Ships using Gases or other Low-flashpoint Fuels,[34] along with amendments to make the Code mandatory which are expected to enter into force on 1 January 2017. Furthermore, IMO approved a workplan for continued work on a goal-based standards safety-level approach and approved generic guidelines for developing IMO goal-based standards. In addition, as encouraged by the General Assembly,[35] IMO continued its ongoing work to improve passenger ship safety.[36]

24. With more countries focusing on opportunities for commercial navigation in the Arctic, IMO recently adopted amendments to the International Convention for the Safety of Life at Sea (SOLAS) and the International Convention for the Prevention of Pollution from Ships (MARPOL) in order to make mandatory the International Code for Ships Operating in Polar Waters, which will apply to new ships constructed after 1 January 2017.

25. In order to protect sensitive areas in a number of geographical areas in the world, including the Great Barrier Reef and the Torres Strait, IMO adopted measures to establish new or amend existing ship routeing systems, as well as ship reporting systems (see para. 114 below). The International Whaling Commission (IWC) also worked with IMO on collaborative ways to minimize the occurrence of collisions between cetaceans and vessels.

26. The General Assembly has continued to emphasize the importance of flag State implementation, including with regard to international shipping rules and standards adopted by IMO in respect of maritime safety, efficiency of navigation and the prevention and control of marine pollution (see also paras. 104-110 below), which have led to a significant reduction in maritime accidents and pollution incidents.[37] In particular, the Assembly has encouraged all States to participate in the Voluntary IMO Member State Audit Scheme, which is expected to become mandatory from 1 January 2016.[38] Implementation of the mandatory IMO instruments included in the scope of the Scheme is also important for the effective implementation of provisions of the Convention.[39]

27. With regard to port State control, the secretariats of the regional agreements have continued to cooperate in the context of joint concentrated inspection

[32] IMSO contribution.

[33] Maritime Safety Committee (MSC) resolution MSC.370 (93).

[34] Resolution MSC.391 (95).

[35] See resolution 69/245, para. 159.

[36] IMO contribution.

[37] Resolution 69/245, para. 157.

[38] IMO contribution.

[39] Ibid. The following mandatory IMO instruments are included in the Scheme: SOLAS 1974 and its 1988 Protocol; MARPOL; the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978; the International Convention on Load Lines, 1966 and its 1988 Protocol; the International Convention on Tonnage Measurement of Ships, 1969; and the International Regulations for Preventing Collisions at Sea, 1972.

campaigns, including with regard to requirements under the 1978 International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, such as hours of rest for crew members, and the Maritime Labour Convention, 2006 (see para. 31 below).[40]

V. People at sea

28. Improving the situation of people at sea has been an increasing focus of the international community. Efforts have concentrated on developing rules and standards for the better treatment of workers in the maritime sector and international migrants by sea. The General Assembly has addressed, inter alia, maritime labour, migration by sea and unsafe practices at sea from a global policy perspective.

29. *Maritime workers*. About 1.5 million seafarers provide the labour force that literally keeps the shipping industry moving, making seafaring one of the world's most important professions.[41] The increasing and beneficial role of women in the maritime industry and the need to strengthen their capacity to engage in a productive manner in that field continues to be addressed by IMO.[42]

30. The theme for the 2015 Day of the Seafarer, "Career at sea", reflects continued support and recognition of the service of, and difficulties faced by, the world's seafarers, as well as presenting an opportunity to inspire others to consider a maritime career as a possibility for decent work.[43]

31. The ratification and implementation of instruments relating to seafarers' role, welfare and rights contribute to improving their working conditions. As at July 2015, there were 65 parties to the Maritime Labour Convention, 2006.[44] The International Labour Organization (ILO) constituted an Ad Hoc Tripartite Maritime Committee to meet in 2016 to make proposals for the amendment of the Seafarers' Identity Documents Convention (Revised), 2003 (No. 185).[45] IMO encouraged its member States to give effect to the 2006 Guidelines on fair treatment of seafarers in the event of a maritime accident.[46] It concluded that further consideration was needed regarding the progressive removal of legislation targeting seafarers and imposing criminal sanctions on them. It also highlighted that seafarers should be given greater training on and awareness of their rights.[47] The importance of maritime education and training more generally was underlined in the Yokohama Declaration, adopted in July 2015.[48]

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[40] See www.imo.org/en/OurWork/MSAS/Pages/PortStateControl.aspx. Also see ILO contribution and resolution 69/245, para. 160.

[41] See www.imo.org/en/About/Events/Pages/Day-of-the-Seafarer.aspx.

[42] See www.imo.org/en/MediaCentre/HotTopics/women/Pages/default.aspx.

[43] See www.imo.org/en/About/Events/Pages/Day-of-the-Seafarer.aspx.

[44] ILO contribution.

[45] ILO document GB.323/LILS/4, Outcome of the Meeting of Experts concerning the Seafarers' Identity Documents Convention (Revised), 2003 (No. 185) (Geneva, 4-6 February 2015), available from www.ilo.org/wcmsp5/groups/public/---ed_norm/---relconf/documents/meetingdocument/wcms_346449.pdf.

[46] IMO document LEG 102/12, para. 4.6. See also IMO contribution.

[47] LEG 102/12, para. 4.5.

[48] See www.imo.org/en/MediaCentre/PressBriefings/Pages/Japan%e2%80%99s-World-Maritime-Day-Parallel-Event--.aspx.

32. Apart from adopting a protocol to tackle modern forms of abusive and forced labour in 2014,[49] ILO launched the Global Action Programme against forced labour and trafficking of fishers at sea in 2015 with the objective, inter alia, of facilitating capacity-building and awareness-raising campaigns for migrant fishers; assistance, recovery and rehabilitation programmes for the victims; and skill training for law enforcement officers and labour inspectors. Guidelines on flag State inspection of working and living conditions on board fishing vessels for the 2007 Work in Fishing Convention (No. 188) will be considered for adoption in September 2015.[50]

33. *Unsafe mixed migration by sea*. Movements of refugees, asylum-seekers, stateless persons and other migrants by sea increased dramatically in 2014 and the first half of 2015. Large numbers of refugees and migrants continued to embark on dangerous sea journeys, typically relying on smugglers (see para. 54 below) in the absence of safe, regular channels, to escape armed conflict and persecution, to seek work opportunities or to rejoin their families. There were approximately 219,000 such arrivals by sea in Europe in 2014.[51] Some new trends have emerged in 2015: in the Mediterranean, routes have undergone a significant eastward expansion. Approximately 128,000 refugees and migrants have moved by sea to Europe, including some 63,500 to Italy and over 63,000 to Greece.[52] At least 1,850 people are known to have perished or gone missing at sea during the first five months of 2015.

34. In South-East Asia, approximately 63,000 people migrated by sea in the Bay of Bengal area in 2014; however, the approximately 25,000 arrivals in the first quarter of 2015 represented twice the number of departures for the same period in 2014.[53]

35. Since late March 2015, approximately 45,000 people are reported to have fled Yemen to nearby countries, a substantial proportion of them by sea, principally to Djibouti and Somalia.[54]

36. Loss of life at sea and other threats to safety and human rights remains a feature of these movements; incidents of violence, exploitation, abduction and trafficking en route or on arrival remained of concern in some regions, as well as "deterrent" measures, such as "pushbacks" at sea.[55]

37. The Office of the United Nations High Commissioner for Refugees (UNHCR) has developed a Global Initiative on Protection at Sea with the core goal of supporting action by States to reduce loss of life at sea, as well as exploitation, abuse and violence, and to establish protection-sensitive responses.[56] "Protection at sea" was the theme of the seventh Dialogue on Protection Challenges of the High Commissioner for Refugees, in December 2014, which fostered a focused exchange of views on, inter alia, rescue and disembarkation, addressing the drivers of irregular movements by sea, and international cooperation to share burdens and responsibilities.[57]

[49] ILO contribution.
[50] Ibid.
[51] Office of the United Nations High Commissioner for Refugees (UNHCR) contribution.
[52] Ibid.
[53] Ibid.
[54] Ibid. Figures valid as at 21 June 2015.
[55] Ibid.
[56] See www.unhcr.org/5375db0d9.html.
[57] See www.unhcr.org/pages/5357caed6.html.

38. In March 2015, IMO hosted the High-Level Meeting to Address Unsafe Migration by Sea,[58] aimed at facilitating dialogue and promoting enhanced cooperation and harmonization between United Nations agencies and other stakeholders. Discussions will continue within IMO on the current legal regime and gaps that need to be addressed.[59]

39. The Convention and IMO instruments set out the obligations of States regarding the rescue of persons in distress at sea, and search and rescue services. IMO continues to assist States to become parties to the 1979 International Convention on Maritime Search and rescue, and to establish or improve search and rescue services, as well as build up cooperation.[60] It has also recently encouraged the promotion and dissemination of new industry guidance on large-scale rescue operations at sea, to ensure the safety and security of seafarers and rescued persons during such operations.[61]

40. UNHCR recently launched a cross-regional special Mediterranean initiative to scale up operational responses to the situation in the Mediterranean.[62] The European Union Parliament proposed in May 2015 a European Agenda on Migration based on the four pillars of "reducing the incentives for irregular migration", "a strong common asylum policy", "saving lives and securing external borders" and "a new policy on legal migration".[63]

41. With respect to the Bay of Bengal and the Andaman Sea, the Ministers for Foreign Affairs of Malaysia, Indonesia and Thailand jointly declared on 20 May 2015 that their countries would provide humanitarian assistance to the 7,000 irregular migrants still at sea.[64] UNHCR, supported by the International Organization for Migration (IOM) and the United Nations Office on Drugs and Crime (UNODC), has developed an inter-agency action plan.[65]

42. In another development, the Brazil Declaration and Plan of Action,[66] adopted in 2014 following the Cartagena+30 process, contemplates the establishment of a regional consultative mechanism in the Caribbean and lays strong foundations for strengthened cooperation on protection at sea in that region.

VI. Maritime security

43. The General Assembly continued to express concern over various threats to maritime security and called upon States to take measures in accordance with international law to combat such threats, including piracy and armed robbery against ships, trafficking and terrorist acts against ships, offshore platforms and other maritime interests.

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[58] www.imo.org/en/About/Events/Pages/High-Level-Meeting-to-Address-Unsafe-Mixed-Migration-by-Sea-(March-2015).aspx.

[59] LEG 102/12, paras. 11.35 and 11.37; IMO contribution.

[60] IMO contribution.

[61] MSC 95/22, para. 21.6, referring to MSC 95/21/1 (ICS).

[62] UNHCR contribution.

[63] European Commission, *A European Agenda on Migration*, COM(2015) 240 final, 13 May 2015, available from www.ipex.eu/IPEXL-WEB/dossier/document/COM20150240.do.

[64] See www.documentcloud.org/documents/2084026-migrants-jointstatement.html#document/p2.

[65] UNHCR contribution.

[66] See www.refworld.org/docid/5487065b4.html.

44. *Piracy and armed robbery at sea*. The overall number of attacks and attempts worldwide slightly declined in 2014, with 291 incidents reported to IMO, a decrease of 2.3 per cent over the previous year.[67] During the first half of 2015, 22 piracy attacks or attempted attacks and 130 incidents of or attempts at armed robbery at sea were reported.[68] In Asia, in contrast to other regions where the number of incidents of piracy and armed robbery against ships decreased, there was an 18 per cent increase in the number of incidents during the first half of 2015 compared to the same period in 2014.[69]

45. In other parts of the world, acts of piracy and armed robbery against ships decreased in 2014 compared to 2013: from 20 incidents in 2013 to 12 in 2015 in the Western Indian Ocean region,[70] with no attacks or attempts reported during the first half of 2015;[71] from 54 to 45 incidents in the Gulf of Guinea;[72] from 15 to 9 incidents in South America and the Caribbean;[73] and from 8 to zero incidents in the Mediterranean Sea.[74] A single incident was reported in the North Atlantic Ocean in 2014.[75]

46. The continued and long-term plight of persons who remain hostages is a cause for serious concern. Although no captured vessels are held by Somali-based pirates, 26 hostages continue to be held by suspected pirates, down from 37 in August 2014.[76] The Gulf of Guinea remains an area of concern, owing to the increase, from 8 in 2013 to 14 in 2014, in the number of attacks that resulted in the kidnapping of crew members.[77]

47. Coordinated international naval efforts, dedicated action by the shipping industry and support by the Contact Group on Piracy off the Coast of Somalia have led to progress being made in addressing piracy off the coast of Somalia.[78] For instance, the capacity-building programmes of IMO and UNODC have contributed to efforts to strengthen maritime law enforcement and increase judicial capacity in Somalia and other States in the region.[79] The UNODC Hostage Support Programme

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[67] IMO, Reports on Acts of Piracy and Armed Robbery against Ships, Annual Report 2014, document MSC.4/Circ.219/Rev.1, 28 April 2015.

[68] IMO, Reports on Acts of Piracy and Armed Robbery against Ships, January-May 2015; gisis.imo.org.

[69] ReCAAP, *Half Yearly Report 2015, 1 January-30 June 2015. Piracy and Armed Robbery against Ships in Asia*, available from www.recaap.org/Portals/0/docs/Reports/2015/ReCAAP%20ISC%20Half%20Yearly%202015%20Report.pdf.

[70] MSC.4/Circ.219/Rev.1, para. 6.

[71] IMO contribution. See also Communiqué of the 18th Plenary of the Contact Group on Piracy off the Coast of Somalia (CGPCS).

[72] MSC.4/Circ.219/Rev.1, para. 8.

[73] Ibid., para. 9.

[74] Ibid.

[75] Ibid.

[76] CGPCS Newsletter, August 2014, available from http://eeas.europa.eu/cfsp/cgpsc/docs/20140903_cgpcs_newsletter_september.pdf; CGPCS Newsletter, May 2015, available from www.lessonsfrompiracy.net/files/2015/05/20150511_CGPCS-Newsletter-May-Vers2-2.pdf.

[77] The Maritime Executive, "2014: Gulf of Guinea piracy declines 18%", 27 January 2015, available from www.maritime-executive.com/article/2014-gulf-of-guinea-piracy-declines-18. See also IMO Assembly resolution A.1069(28).

[78] See Security Council document S/2014/740, paras. 5 and 6.

[79] IMO and UNODC contributions. See UNODC, Maritime Crime Programme — Annual Report 2014, available from www.unodc.org/documents/easternafrica//MCP_Brochure_December_2014_wv_6_1.pdf.

has continued to assist hostages still held in captivity and to advocate for their safe release.[80] The capacity-building activities of the Division are presented in paragraph 130 below.

48. In recognition of progress in the region, in June 2015, IMO approved a circular excluding the Gulf of Suez and the Red Sea from the High Risk Area definition.[81] It also approved revised interim recommendations for flag States regarding the use of privately contracted armed security personnel on board ships in the High Risk Area to recommend that private maritime security companies obtain ISO 28007-1:2015 certification or meet applicable national requirements.[82]

49. In the Gulf of Guinea, implementation of a legal reform programme aimed at, inter alia, assisting States with assessing and improving national legal frameworks covering piracy and armed robbery against ships has commenced.[83] In that regard, it can be noted that a database of information on national legislation on piracy compiled with input from IMO and UNODC is being maintained by the Division.[84] Since 2013, UNODC has also been collecting legislation, and case law on piracy is available on its knowledge management portal.[85]

50. The European Union Gulf of Guinea Action Plan 2015-2020 is intended to support the efforts of several regional organizations and signatory States to the 2013 Yaoundé Code of Conduct concerning the Repression of Piracy, Armed Robbery against Ships, and Illicit Maritime Activity in West and Central Africa to coordinate their responses to combat maritime crime.[86]

51. In Asia, the Association of Southeast Asian Nations adopted a regional Work Plan for Maritime Security 2015-2017, in cooperation with the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP) and other organizations.[87]

52. *Illicit traffic in narcotic drugs and psychotropic substances*. UNODC has been considering the possibility of applying the piracy prosecution model to address illicit drug trafficking.[88] In 2014, there was a sharp rise in illicit traffic of narcotic drugs, particularly heroin, in the Indian Ocean, due to a shift of global trafficking routes from central Asia to the eastern African coast.[89] The recently established Indian Ocean Forum on Maritime Crime aims to facilitate the sharing of information, the creation of prosecution networks and cooperation among the countries in the region against a range of criminal activities at sea.[90]

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[80] Ibid.
[81] IMO contribution. See also MSC 95/22, paras. 15.16 to 15.21, and 15.36.
[82] MSC 95/22, paras. 15.26 to 15.36.
[83] UNODC contribution.
[84] See www.un.org/depts/los/piracy/piracy_national_legislation.htm.
[85] UNODC contribution.
[86] Council of the European Union, Document 7168/15, 16 March 2015.
[87] ReCAAP, *Quarterly Report 1 January-1 March 2015, Piracy and Armed Robbery against Ships in Asia*, available from www.recaap.org/DesktopModules/Bring2mind/DMX/Download.aspx?Command=Core_Download&EntryId=390&PortalId=0&TabId=78.
[88] UNODC, *Maritime Crime Programme, Annual Report 2014*.
[89] Ibid.
[90] UNODC contribution.

53. *Illicit traffic in firearms*. Firearms are reportedly smuggled via the same routes as drugs, often by the same persons who transport illegal goods and migrants.[91] At the Organization for Security and Cooperation in Europe (OSCE) conference entitled "Illicit Trafficking in Small Arms and Light Weapons and Fight against Terrorism in the Mediterranean Region" in 2014, participants discussed challenges associated with arms trafficking and illicit trading routes in the OSCE region and other affected areas in order to identify possible measures and tools to fight that threat.[92]

54. *Smuggling and trafficking of persons*. Also of great concern is the increase in smuggling of migrants in the Mediterranean region, as well as in South-East Asia (see also paras. 33-36 above). Activities to address the issue included: the convening of the first regional training workshop to prevent and combat the smuggling of migrants by sea, for Mexico and the Central American and Caribbean region, in March 2015,[93] the ongoing development and mentoring of multi-agency port intelligence units in Cambodia, Indonesia and Thailand,[94] the recent launch by the European Union of an operation to suppress the activities of migrant smugglers or traffickers[95] and the development by IMO, IOM and UNODC of a joint database on migrant incidents and on suspected smugglers and vessels.

55. *Maritime cybersecurity*. IMO is considering the development of voluntary guidelines on cybersecurity practices to protect elements of the maritime transportation system in order to combat a possible emerging threat to navigation.[96]

VII. Sustainable development of oceans and seas

56. The essential role of the oceans and seas in sustainable development has been emphasized by the General Assembly in its resolutions on oceans and the law of the sea[97] and also in "The future we want".[98] The sixteenth meeting of the Informal Consultative Process provided an opportunity to consider progress in the integration of the three dimensions of sustainable development.[99]

57. States are increasingly looking to the oceans to further develop their economies. In order to discuss how to achieve this in a sustainable manner, a number of events were held during the reporting period, including the Blue Week in Portugal (June 2015),[100] which culminated in the adoption of a ministerial

[91] *UNODC Study on Firearms 2015*, available from www.unodc.org/documents/firearms-protocol/UNODC_Study_on_Firearms_WEB.pdf.

[92] See www.osce.org/networks/135276?download=true.

[93] See www.unodc.org/ropan/en/HumanTrafficking/reports-of-the-regional-workshop-to-address-smuggling-of-migrants-som-by-sea-in-mexico--central-america-and-the-caribbean.html.

[94] UNODC contribution.

[95] See Council of the European Union decision (CFSP) 2015/972 of 22 June 2015.

[96] IMO contribution; MSC 95/22, paras. 4.4 to 4.11 and MSC 94/21, paras. 4.3-4.7; Command, Control, and Interoperability Center for Advanced Data Analysis, "Terrorists and criminals can remotely hijack ships and insert malware to make 'zombie attacks' on ports", 29 January 2015, www.ccicada.org/2015/01/29/ccicada-addresses-the-growing-threat-of-maritime-cyber-attacks.

[97] Most recently in resolution 69/245.

[98] Resolution 66/288.

[99] See A/70/74.

[100] See www.blueweek.pt/en.

declaration,[101] and meetings convened by the African Union and the Economic Commission for Africa (see para. 140 below).

58. At the United Nations summit in September 2015, States will adopt sustainable development goal 14 (see para. 1 above), containing 10 targets: three on means of implementation, including the commitment to enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in the Convention, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of "The future we want".[102] Oceans can also contribute to the achievement of the other goals in the draft outcome document of the United Nations summit, entitled "Transforming our world: the 2030 Agenda for Sustainable Development".[103]

59. In accordance with the draft outcome document, all the goals and targets will be followed up and reviewed using a set of global indicators, complemented by indicators at the regional and national levels which will be developed by Member States.[104] The follow-up and review processes, inter alia, will build on existing platforms, avoid duplication and benefit from the active support of the United Nations system and other multilateral institutions.[105] The High-level Political Forum, which is convened under the auspices of the General Assembly and the Economic and Social Council, will have the central role in overseeing the follow-up and review processes at the global level.[106] Some proposals to assist in the review of goal 14 have been put forward, such as the proposal for triennial oceans and seas global conferences.[107] Further consideration could also be given to the possible role of the Informal Consultative Process in the review of goal 14 and other ocean-related goals. The General Assembly established the Consultative Process to facilitate the annual review by the Assembly, in an effective and constructive manner, of developments in ocean affairs by considering the Secretary-General's report on oceans and the law of the sea and by suggesting particular issues to be considered by it, with an emphasis on identifying areas where coordination and cooperation at the intergovernmental and inter-agency levels should be enhanced.[108] The Assembly has recognized the role of the Consultative Process as a unique forum for comprehensive discussions on issues relating to oceans and the law of the sea, consistent with the framework provided by the Convention and chapter 17 of Agenda 21.[109]

A. Developing marine science and scientific information in support of decision-making

60. The General Assembly has consistently called for efforts to continue improving understanding and knowledge of the oceans and the deep sea by increasing marine scientific research activities in accordance with the Convention.[110]

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[101] See http://embaixadaportugalargel.com/2015/pdf/declaration-5-june.pdf.
[102] A/69/L.85, annex.
[103] Ibid.
[104] Ibid., para. 75.
[105] Ibid., para. 74.
[106] Ibid., paras. 47 and 82. See also resolution 67/290, para. 3.
[107] See, for example, A/70/78, para. 41.
[108] Resolution 54/33, para. 2.
[109] Resolution 69/245, para. 290.
[110] Ibid., para. 239.

The draft 2030 agenda for sustainable development also highlights the importance of increasing scientific knowledge, developing research capacity and transferring marine technology, taking into account the Intergovernmental Oceanographic Commission (IOC) of the United Nations Educational, Scientific and Cultural Organization (UNESCO) Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries.[111]

61. The Capacity Development Strategy adopted by the Assembly of IOC recommends, inter alia, enhancing access to scientific tools and methodologies, the communication between scientific and policymakers' communities and expanding ocean literacy.[112] In this regard, the OceanTeacher Global Academy project was launched to develop a network of regional training centres in Africa, the Caribbean and Latin America, and the Indian Ocean and Western Pacific regions. The Global Ocean Science Report, launched in 2014, will provide a tool for mapping and evaluating the human and institutional capacity of States in terms of marine research, observations and data/information management, and provide a global overview of the main fields of interest, technological developments, capacity-building needs and overall trends, as well as information on research investments and the status of ocean research.[113]

62. The 2nd International Ocean Research Conference on the theme "One Planet, One Ocean", in 2014, provided an opportunity to review progress in the ocean sciences in the past 20 years and discuss the coming decade of international collaboration on marine science and technology.[114] Preparations are ongoing for the Second International Indian Ocean Expedition, aimed at promoting awareness and understanding of Indian Ocean processes and their impacts on regional ecosystems, human populations and global climate.[115]

63. The International Group for Marine Ecological Time Series compiled data from more than 400 biochemical time series sites worldwide, the analysis of which will assist in distinguishing between natural and human-induced changes in marine ecosystems and in understanding ecosystem responses to climate change.[116]

64. The General Assembly has also stressed the importance of increasing scientific understanding of the oceans/atmosphere interface.[117] In that regard, it can be noted that the Global Ocean Observing System continued to expand, through the establishment of the Tropical Pacific Observing System and the Deep Ocean Observing Strategy. National meteorological and hydrological services, as well as regional bodies,[118] continued to study and provide forecasting for the El Niño Southern Oscillation and other factors which drive global climate patterns.[119] The World Meteorological Organization (WMO) currently indicates a moderate El Niño

[111] A/69/L.85, annex, goal 14, para. 14 a.

[112] See IOC resolution XXVIII-2. The strategy is available as documents IOC-XXVIII/2 Annex 8 Add. and IOC-XXVIII/2 Annex 8 Corr. Rev.

[113] IOC contribution.

[114] See http://backendunesco.fnob.org.

[115] IOC contribution. See also www.iocunesco-oneplanetoneocean.fnob.org.

[116] IOC contribution.

[117] Resolution 69/245, para. 249.

[118] CPPS contribution.

[119] See www.wmo.int/pages/prog/wcp/wcasp/enso_update_latest.html.

event which began late in 2014, with a majority of models forecasting a strengthening of the event.

65. One of the seven global targets of the Sendai Framework for Disaster Risk Reduction 2015-2030 is to substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030.[120] WMO is working with interested stakeholders, partners and organizations to develop and facilitate an international network for multi-hazard early warning systems.[121] The Comisión Permanente del Pacífico Sur (CPPS) agreed on a regional communication protocol and built a virtual platform for the national tsunami warning centres of the South-East Pacific.[122]

66. As regards the exchange of and access to ocean data, the importance of which has also been highlighted by the General Assembly,[123] recent developments include the linkage made by the International Oceanographic Data and Information Exchange (IODE), the Ocean Biogeographic Information System (OBIS) and the International Coastal Atlas Network with ongoing projects that have a data and information management component or require data and information management expertise.[124] OBIS, a part of IODE, now has 42 million marine species records.[125]

67. Efforts to gather environmental baseline data, in particular data on the fauna associated with exploration areas in the Area have also continued.[126] The Authority worked to standardize taxonomy for megafauna, macrofauna and meiofauna of the Area. Upon the conclusion of that work, contractors, prospectors and marine scientific research organizations will be able to provide the Authority with comparable information and data for either their exploration areas or other areas within the Clarion-Clipperton Zone, and for an environmental management plan for the Zone.[127]

68. Additional regional workshops to facilitate the description of ecologically or biologically significant marine areas were convened under the auspices of the Convention on Biological Diversity for the North-East Indian Ocean and the North-West Indian Ocean, and more are planned for other regions.[128] Work also continued on the identification of vulnerable marine ecosystems (see para. 80 below).

B. Assessments in support of decision-making

69. Monitoring and assessments provide an essential, sound scientific basis for the sustainable management of oceans and their resources. They are also an essential element of adaptive management.

70. *The Regular Process for Global Reporting and Assessment of the State of Marine Environment, including Socioeconomic Aspects*. The first global integrated

[120] Resolution 69/283, annex II, para. 18 (g).
[121] WMO contribution.
[122] CPPS contribution.
[123] For example, resolution 69/245, paras. 29, 31, 51 and 68.
[124] IOC-XXVIII/3 prov. Pt.3 Rev., para. 14.
[125] IOC contribution.
[126] ISBA/21/A/2.
[127] Ibid.
[128] Convention on Biological Diversity secretariat contribution.

marine assessment, the outcome of the first cycle of the Regular Process, has been completed by the Group of Experts. The assessment is expected to provide a baseline for the state of the marine environment, including socioeconomic aspects, and contribute to building a better science/policy interface for sound decision-making, as well as identify capacity-building gaps. The information in the assessment can contribute, inter alia, to the General Assembly's review of ocean issues, including consideration of the topic of focus by the Informal Consultative Process.

71. The sixth meeting of the Ad Hoc Working Group of the Whole on the Regular Process will be convened in September 2015 to consider the assessment and its summary[129] with a view to making recommendations to the General Assembly on how States, intergovernmental organizations and relevant entities may use the assessment as a scientific basis in their future decision-making and programmes of work, and on the lessons learned and the way forward in preparation for the second cycle of the Regular Process, also bearing in mind the need to ensure the predictability and sustainability of financial resources[130] to support its operations.[131]

72. *Other assessments*. At the global level, other relevant assessments include those carried out under the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)[132] and the Transboundary Water Assessment Programme.[133] In a context of scarcity of resources, the challenge will be to avoid overlaps and duplication. The General Assembly has recognized the importance of ensuring that the assessments prepared under IPBES and the Regular Process support each other and avoid unnecessary duplication.[134] Consequently, the IPBES plenary agreed to consider, at its fourth session, delaying its proposed regional assessment on the open oceans pending the outcome of the Regular Process' first assessment.[135]

73. At the regional level, a number of initiatives have continued to support and feed into global assessments, in particular the Regular Process. For example, a regional state of the coast report for the Western Indian Ocean region was launched at the Conference of the Parties to the Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Western Indian Ocean Region (the Nairobi Convention), in June 2015.[136] The Wider Caribbean Region is developing the first report on the state of the Convention area.[137]

C. Conservation and management of living marine resources

74. The potential contribution of sustainable fisheries to sustainable development is well-recognized.[138] The General Assembly, in particular through its resolutions on

[129] A/70/112.

[130] See A/70/112, paras. 19-22.

[131] Resolution 69/245, para. 277.

[132] See www.ipbes.net.

[133] IOC-UNESCO contribution. The assessment products of the Transboundary Water Assessment Programme will be made available through a future "One-Shared-Ocean" web portal.

[134] Resolution 69/245, para. 270.

[135] See IPBES/3/18.

[136] See www.unep.org/NairobiConvention/Publications/Regional_State_of_Coast_Report_for_the_Western_Indian_Ocean.asp.

[137] UNEP contribution.

[138] OECD, *Green Growth in Fisheries and Aquaculture*, OECD Green Growth Studies (Paris, OECD Publishing, 2015), available from http://dx.doi.org/10.1787/9789264232143-en. On blue growth, see FAO contribution.

sustainable fisheries,[139] has highlighted actions which States should take, individually or through international organizations, to improve the conservation and management of living marine resources, including through the effective implementation of the Convention, the United Nations Fish Stocks Agreement and related international instruments. Sustainable development goal 14 (see para. 58 above) also calls for a number of actions to be taken by 2020 in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics.[140] During the period under consideration, a number of actions have been taken by intergovernmental organizations in furtherance of those General Assembly resolutions.

Developments at the global level

75. 2015 marks the twentieth anniversary of the opening for signature of the 1995 United Nations Fish Stocks Agreement, which elaborates on the provisions of the Convention regarding the conservation and sustainable use of straddling fish stocks and highly migratory fish stocks. Pursuant to General Assembly resolution 69/109, the Secretary-General convened a round-table discussion, on 17 March, to commemorate that anniversary.[141]

76. The General Assembly decided that the Review Conference on the 1995 Agreement would be resumed for one week in the first half of 2016.[142] To assist it in discharging its mandate under article 36 of the Agreement, the resumed Review Conference will have before it an updated report of the Secretary-General, prepared in cooperation with the Food and Agriculture Organization of the United Nations (FAO).[143] The eleventh round of informal consultations of States parties to the 1995 Agreement, in March 2015, served primarily as a preparatory meeting for the resumed Review Conference. It, inter alia, agreed on the draft provisional agenda and the draft organization of work for the resumed Review Conference.[144]

77. Other actions taken at the global level to support the implementation of international instruments highlighted in General Assembly resolutions include the support provided by FAO to States in the development of national legislation to implement international agreements, including the Convention.[145] FAO also organized an expert workshop to discuss elements of the global assistance programme for the implementation of the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication and will, in addition, organize a series of regional workshops for the development of regional action plans.[146]

78. With respect to the 2009 Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing, FAO is conducting a series of regional capacity-development workshops and country-specific training, and has supported States in strengthening relevant national fisheries legislation.

[139] See, for example, resolution 69/109.
[140] See A/69/L.85.
[141] See www.un.org/Depts/los/convention_agreements/fishstocksmeetings/UNFSA_table.pdf.
[142] Resolution 69/109, para. 40.
[143] Ibid., para. 41.
[144] See www.un.org/Depts/los/convention_agreements/fishstocksmeetings/icsp11_final_fsa.pdf.
[145] FAO contribution.
[146] Ibid.

FAO also developed a guide for the implementation of the 2009 Agreement and training manuals for port inspection.[147]

79. Through its programmes on the 2009 Agreement, FAO is also promoting the Voluntary Guidelines on Flag State Performance.[148] Furthermore, in February 2015, the Global Record Informal Open-Ended Technical and Advisory Working Group addressed key issues relating to the Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels, such as the scope, system development, governance framework and financial mechanism.[149]

80. *Bottom fisheries*. Regional fisheries management organizations and arrangements continue to implement conservation and management measures to identify and protect vulnerable marine ecosystems from adverse impacts of bottom fishing.[150] Furthermore, the Database on Vulnerable Marine Ecosystems, developed by FAO in collaboration with the regional bodies with mandates to manage deep-sea fisheries in areas beyond national jurisdiction, was launched.[151]

81. The General Assembly decided to conduct a further review of the actions taken by States and regional fisheries management organizations and arrangements in response to paragraphs 113, 117 and 119 to 124 of resolution 64/72 and paragraphs 121, 126, 129, 130 and 132 to 134 of resolution 66/68, with a view to ensuring effective implementation of the measures therein and to make further recommendations, where necessary. That review will be preceded by a two-day workshop, to be convened by the Secretary-General in the second half of 2016, to discuss the implementation of those paragraphs.[152] The workshop and subsequent review will be informed by a report of the Secretary-General, prepared in cooperation with FAO.[153]

Developments at the regional level

82. A wide range of conservation and management measures have been adopted by regional fisheries management organizations and arrangements, including electronic catch document schemes,[154] the inclusion of the IMO and Lloyd's Register numbering system in publicly available databases of fishing vessels[155] and measures for specific target species and non-target species, such as sharks.[156] States also continue to be engaged in the development of new regional fisheries management organizations and arrangements,[157] the modernization of regional fisheries management organizations' constitutive instruments[158] and performance reviews.[159] Regional fisheries management organizations and arrangements continue to cooperate

[147] Ibid.
[148] Ibid.
[149] Ibid.
[150] See, for example, CCAMLR contribution.
[151] FAO contribution.
[152] Resolution 69/109, paras. 162-163.
[153] Ibid., para. 164.
[154] ICCAT contribution
[155] Western & Central Pacific Fisheries Commission (WCPFC) contribution.
[156] Ibid.
[157] For developments relating to the Red Sea and Gulf of Aden Region, see Economic and Social Commission for Western Asia and FAO contributions.
[158] See, for example, ICCAT contribution.
[159] On the establishment of an ad hoc working group on performance review to draw up the terms of reference of the next review (recommendation 14-12), see ICCAT contribution.

with each other, for example, in relation to the listing of vessels engaged in illegal, unreported and unregulated fishing.[160] Moreover, the first meeting of the North East Atlantic Fisheries Commission (NEAFC) and the Commission for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Commission), held in April 2015 under the collective arrangement between competent international organizations on cooperation and coordination regarding selected areas in areas beyond national jurisdiction in the North-East Atlantic in 2014[161] created a better understanding of the priorities for each organization and their respective ways of working and decision-making[162] (see also para. 91 below). In the Gulf of Mexico, the United Nations Industrial Development Organization (UNIDO) Strategic Action Programme for the Gulf of Mexico large marine ecosystem foresees the implementation of joint stock assessments and the development of management plans by Mexico and the United States of America.

83. In the Sudan, the UNIDO "Surveys of renewable marine resources in the Red Sea State" and project on "Building institutional capacities for the sustainable management of the marine fisheries in the Red Sea State" have supported the conservation and utilization of living marine resources.[163] Capacity-building activities for fisheries management carried out by regional fisheries management organizations and arrangements include the following. The International Commission for the Conservation of Atlantic Tunas (ICCAT) has, inter alia, funded participation in meetings, as well as training activities and regional workshops.[164] It also adopted recommendations on the establishment of a Monitoring, Control and Surveillance Fund, aimed principally at assisting developing countries to implement port State measures and other relevant activities.[165] The Western and Central Pacific Fisheries Commission passed a measure that directs members, cooperating non-members and participating territories to contribute to the capacity of developing countries in fisheries and related disciplines.[166] The Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) established a General Science Capacity Special Fund and a scholarship which is available to early career scientists from CCAMLR members.[167]

D. Conservation and sustainable use of marine biodiversity

84. Marine biodiversity underpins a variety of ecosystem goods and services, from nutrient cycling to food security, carbon sequestration and recreation. The General Assembly has consistently reaffirmed the need for States, individually or through competent international organizations, to urgently consider ways to integrate and

[160] See, for example, the ICCAT guidelines for the procedures to be followed for the inclusion of vessels on the illegal, unreported and unregulated vessel lists of other tuna regional fisheries management organizations and arrangements on the ICCAT illegal, unreported and unregulated vessel list, to promote transparency and standard treatment (resolution 14-11). ICCAT contribution.

[161] For the text of the arrangement, see summary record of the meeting of the OSPAR Commission, Cascais, June 2014, annex 33.

[162] OSPAR contribution.

[163] UNIDO contribution.

[164] ICCAT contribution.

[165] Ibid.

[166] WCPFC contribution.

[167] CCAMLR contribution.

improve the management of risks to the marine biodiversity of seamounts, cold water corals, hydrothermal vents and certain other underwater features.[168]

85. A number of initiatives are under way to promote understanding of the impacts of major threats to marine biodiversity, such as the impacts of fishing activities, pressures on the marine environment, climate change and ocean acidification,[169] and identify means to prevent or mitigate those impacts (see sect. VII.C, E and F; and sect. VIII below). With regard to the General Assembly's call upon States to further consider options to identify and protect ecologically or biologically significant areas,[170] work has continued in the context of the Convention on Biological Diversity (see para. 68), FAO and regional fisheries management organizations and arrangements (see para. 80) and IMO (see paras. 25 and 114) to describe and/or identify such areas.[171]

86. Measures also continue to be adopted for specific ecosystems and species, in particular marine migratory species, including cetaceans.[172] With regard to coral reefs, the parties to the Convention on Biological Diversity adopted priority actions to achieve Aichi Biodiversity Target 10 for coral reefs and closely associated ecosystems.[173] Accordingly, a global coral reef portal is being developed to facilitate collaboration and information-sharing on the sustainable management of coral reefs and related ecosystems (see also para. 120 below).[174] Work has also continued under the United Nations Environment Programme (UNEP) Global Coral Reef Partnership, in particular on mitigation of the impacts of tourism, the development of indicators and assessments, and the use of economic instruments.[175] An integrated approach to community-based coral reef conservation and management emphasizing land-sea connectivity is being promoted through the International Coral Reef Initiative.[176]

87. A number of capacity-building activities have been conducted, including in the context of the Convention on Biological Diversity Sustainable Ocean Initiative, with a focus on integrated marine and coastal management and marine spatial planning to achieve the Aichi Biodiversity Targets.[177]

88. *Marine genetic resources*. The General Assembly has consistently recognized the importance of research on marine genetic resources for the purpose of enhancing

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[168] Resolution 69/245, preamble and paras. 221 and 222.

[169] For example, the "Our Ocean" Conference, to be held in Valparaiso, Chile, on 5 and 6 October 2015 (www.nuestrooceano2015.gob.cl/).

[170] Resolution 69/245, para. 225.

[171] Convention on Biological Diversity secretariat, FAO, CCAMLR, NEAFC, WCPFC and IMO contributions.

[172] See, for example, resolutions of the Eleventh Meeting of the Conference of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals, available from www.cms.int/en/meeting/eleventh-meeting-conference-parties-cms; outcome of the Fifth Meeting of the Parties to the Agreement on the Conservation of Albatrosses and Petrels (see www.acap.aq/en/meeting-of-the-parties/mop5); outcome of the 65th meeting of the International Whaling Commission (see https://iwc.int/iwc65docs). See also CCAMLR and UNEP contributions.

[173] Decision XII/23, para. 11.

[174] Convention on Biological Diversity secretariat contribution.

[175] UNEP contribution.

[176] Minutes of the 29th General Meeting of the International Coral Reef Initiative, available from www.icriforum.org/icri-documents/icri-meetings-minutes/icri-gm-29-minutes-general-meeting.

[177] Convention on Biological Diversity secretariat contribution.

the scientific understanding, potential use and application, and enhanced management of marine ecosystems.[178] In May 2015, the results were released of analyses of a portion of the 35,000 samples of planktonic organisms, including viruses, microbes and microscopic eukaryotes, collected during the 2009-2013 TARA Oceans expedition.[179] The analyses revealed around 40 million genes, the majority of which are new to science.

89. With regard to access and benefit-sharing, the parties to the Nagoya Protocol on Access and Benefit-sharing adopted decisions on, inter alia, compliance and the Access and Benefit-sharing Clearing-House and information sharing.[180] The need for and modalities of a global multilateral benefit-sharing mechanism will be discussed at an expert meeting scheduled for February 2016.

90. *Marine biodiversity of areas beyond national jurisdiction*. Following the completion of the work of the BBNJ Working Group in January 2015,[181] the General Assembly, in resolution 69/292 of 19 June 2015, decided to develop an international legally binding instrument under the Convention on the conservation and sustainable use of marine biodiversity of areas beyond national jurisdiction.

91. A variety of other actors have also shown increased interest recently in marine biodiversity of areas beyond national jurisdiction. For example, in the Pacific, the inaugural meeting of the Pacific Ocean Alliance, held in May 2015, focused on providing information on issues of relevance to the General Assembly process.[182] UNEP has launched the Partnership for Regional Ocean Governance, in the context of which it has assisted the parties to the Convention for Cooperation in the Protection, Management and Development of the Marine and Coastal Environment of the Atlantic Coast of the West, Central and Southern Africa Region (the Abidjan Convention) to convene a working group, established by the Conference of the Parties to that Convention, to study issues relating to the marine biodiversity of areas beyond national jurisdiction.[183] In June 2015, the Conference of the Parties to the Nairobi Convention urged contracting parties to cooperate in improving the governance of areas beyond national jurisdiction, building on existing regional institutions, including the Nairobi Convention.[184] In the North-East Atlantic, NEAFC and OSPAR discussed at their first meeting (see para. 82 above), inter alia, information on science and proposed uses, cooperation on environmental impact assessments, consulting on respective objectives, and the exchange of data.[185]

E. Pressures on the marine environment

92. The General Assembly annually emphasizes the importance of the implementation of Part XII of the Convention in order to protect and preserve the marine environment and its living marine resources against pollution and physical

[178] Resolution 69/245, para. 218.
[179] See http://oceans.taraexpeditions.org/en/m/science/results.
[180] See UNEP/CBD/NP/COP-MOP/1/10.
[181] A/69/780, annex.
[182] Pacific Islands Forum Secretariat (PIFS) contribution. See also resolution 69/292.
[183] UNEP contribution.
[184] See www.unep.org/NairobiConvention/Meetings/COP8/index.asp.
[185] See ISBA/21/C/9. Also, see OSPAR contribution.

degradation.[186] It also encourages States and international organizations to take a number of specific measures. Recent action to address pressures from land- and sea-based activities is presented below. In addition, it can be noted that the secretariat of the Abidjan Convention, with the assistance of OSPAR, is developing the first regional environmental standards in Africa regulating the exploration and exploitation of offshore oil and gas.[187]

93. *Land-based activities, including marine debris*. In its resolution 69/245, the General Assembly recognized that most of the pollution load of the oceans emanates from land-based activities, and called upon States, as a matter of priority, to implement the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities and to take all appropriate measures to fulfil the commitments in the Manila Declaration on Furthering the Implementation of the Global Programme of Action.[188]

94. In accordance with the Manila Declaration,[189] efforts to implement the Global Programme of Action have focused on marine litter, wastewater and nutrient management. Efforts to address other land-based sources of pollution include an International Atomic Energy Agency (IAEA) programme entitled "Modelling and data for radiological impact assessments", covering, inter alia, the transfer of radionuclides accidentally released from land-based facilities.[190] UNIDO undertook capacity-building measures to assist States in the implementation of the Stockholm Convention on Persistent Organic Pollutants and the Minamata Convention on Mercury.[191]

95. With regard to nutrient management, the Global Partnership on Nutrient Management, supported by UNEP, continued to develop programmes to address nutrient pollution of the marine environment. In 2015, it is focusing its efforts on knowledge generation, technical services, outreach and advocacy, and partnership and network development.[192]

96. As to wastewater, recent measures aimed at helping improve wastewater management and reducing the pollution loads in coastal cities include the development of Regional Guidelines on Wastewater Management in Coastal Cities on the Red Sea and Gulf of Aden by the Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden.[193] Also, the UNEP Global Wastewater Initiative, in collaboration with Italy, supported a two-year wastewater reuse pilot project in the region of Gerga, in Egypt.[194]

97. As regards marine debris, the General Assembly has noted with concern its negative effects, especially those of plastics, and the need to better understand and reduce such pollution.[195] In this connection, the General Assembly decided that

[186] Resolution 69/245, para. 162.
[187] OSPAR contribution.
[188] Resolution 69/245, para. 190.
[189] UNEP/GCSS.XII/INF/10, annex.
[190] IAEA contribution.
[191] UNIDO contribution.
[192] See unep.org/gpa/documents/meetings/gpnm/steeringcommittee/ReportofGPNMSteeringCommitteeDecember2014.pdf.
[193] UNEP contribution.
[194] www.unep.org/gpa/news/Egyptreuseswastewater.asp.
[195] Resolution 69/245, paras. 181-184.

discussions at the seventeenth meeting of the Informal Consultative Process, in 2016, would be focused on the theme "marine debris, plastics and microplastics".[196] The Process previously discussed marine debris in 2005 and its recommendations are reflected in relevant General Assembly resolutions. It is expected that marine plastic debris and microplastics will also be considered at the second United Nations Environment Assembly, in 2016, on the basis of a UNEP study.[197]

98. Marine debris was also the focus of attention in other organizations. For example, the Convention on Biological Diversity secretariat is developing, with the assistance of experts, practical guidance on preventing and mitigating the significant adverse impacts of marine debris on marine and coastal biodiversity and habitats.[198] The parties to the Convention on Migratory Species adopted a resolution on the management of marine debris, inter alia encouraging States parties to address knowledge gaps in the management of marine debris and to develop campaigns of specific relevance to migratory species.[199] IWC continued to study the impacts of marine debris on cetaceans and ways to address those impacts, including with a view to preventing their incidental capture.[200]

99. Action at the regional level includes the adoption and implementation of regional action plans, such as the Regional Action Plan on Marine Litter for the Baltic Sea,[201] the Regional Plan on Marine Litter in the framework of the UNEP Mediterranean Action Plan for the Convention for the Protection of the Mediterranean Sea against Pollution, the revised Regional Action Plan on Marine Litter Management for the Wider Caribbean Region,[202] the CPPS Regional Programme for the Integrated Management of Marine Litter in the Southeast Pacific,[203] the OSPAR Regional Action Plan on Marine Litter[204] and the Action Plan for the Protection, Management and Development of the Northwest Pacific Region.[205] The CCAMLR Scientific Committee annually reviews the available data and reports on the trends in marine debris.[206]

100. In June 2015, the members of the Group of Seven (G7) committed themselves to taking priority action and finding solutions to combat marine litter, stressing the need to address land- and sea-based sources, removal action, and education, research and outreach.[207]

101. A number of reports and studies on various aspects of marine debris have been published, including with regard to abandoned, lost or otherwise discarded fishing

[196] Ibid., para. 298.
[197] United Nations Environment Assembly resolution 1/6, available from www.unep.org/unea/UNEA_Resolutions.asp.
[198] Convention on Biological Diversity secretariat contribution.
[199] Conference of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals, resolution 11.30 of 1 December 2014.
[200] IWC contribution.
[201] Baltic Marine Environment Protection Commission — Helsinki Commission (HELCOM) contribution.
[202] UNEP contribution.
[203] CPPS contribution.
[204] OSPAR contribution.
[205] www.nowpap.org.
[206] CCAMLR contribution.
[207] Leaders' Declaration, G7 Summit, 7 and 8 June 2015, available from www.g7germany.de.

gear,[208] as well as a review and analysis of regional and national legal and policy frameworks for selected regions/countries where recovery and clean-up missions have been successful.[209] Through its study entitled "Sources, fate and effects of microplastics in the marine environment: a global assessment", the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) aims to provide an improved evidence base to support policy and management decisions on measures to reduce the input of microplastics into the oceans. Inter alia, the study highlights the need to continue to increase scientific knowledge and awareness of that issue.[210] The Group is to present a report on the impact of microplastics on fish by May 2016.[211]

102. *Disposal of wastes*. In November 2014, the parties to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (the London Convention) and its 1996 Protocol decided to undertake a scientific study relating to all radioactive wastes and other radioactive matter other than high-level wastes or matter in order to review the prohibition on the dumping of such substances, as required under the London Convention and Protocol.[212] In this regard, IAEA prepared a report entitled "Determining the suitability of materials for disposal at sea under the London Convention 1972 and London Protocol 1996: A radiological assessment procedure" and updated the guidelines to determine radionuclide levels in materials that may be dumped at sea and the database on the inventory of historical disposals, accidents and losses in the oceans involving radioactive materials.[213]

103. Other developments include the adoption of guidance for consideration of marine geoengineering activities, by the parties to the 1996 Protocol.[214] Furthermore, an international workshop to increase scientific understanding of the impact of the disposal of mine tailings at sea on the marine environment was held in Lima in June 2015, under the auspices of GESAMP.

104. *Shipping activities*. As recognized by the General Assembly, international shipping rules and standards adopted by IMO have led to a significant reduction in maritime accidents and pollution incidents.[215] Efforts to address pressures on the marine environment from shipping have therefore been focused on the entry into force of relevant instruments and the adoption of further measures.

105. As encouraged by the General Assembly, IMO has worked to facilitate the entry into force of the 2004 International Convention for the Control and Management of Ships' Ballast Water and Sediments. The number of contracting Governments is currently 44, representing 32.86 per cent of the world's merchant fleet tonnage, which is slightly short of the 35 per cent required for its entry into force.

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[208] FAO contribution.
[209] Ibid.
[210] GESAMP, "Sources, fate and effects of microplastics in the marine environment: a global assessment" (2015) available from www.gesamp.org/publications/publicationdisplaypages/reports-and-studies-no.-90.
[211] IOC-UNESCO contribution.
[212] IMO contribution.
[213] IAEA contribution.
[214] IMO contribution.
[215] Resolution 69/245, para. 157.

106. IMO and the International Oil Pollution Compensation (IOPC) Funds secretariat have worked to bring into force the 2010 International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, as encouraged by the General Assembly.[216] The IOPC Funds secretariat has also undertaken activities to encourage worldwide adoption and understanding of the international regime for oil pollution compensation.[217]

107. With regard to air pollution from ships, IMO considered amendments and revisions to existing guidance and requirements under MARPOL. It also agreed to develop guidelines for sampling and verification of fuel oil used on board ships.[218]

108. With regard to the removal of wrecks, the General Assembly has requested States to take appropriate measures to address hazards that may be caused by wrecks and drifting or sunken cargo to navigation or the marine environment.[219] Thousands of corroding ships sunk during the Second World War, for example, are estimated to be in danger of leaking oil into the environment. The Nairobi International Convention on the Removal of Wrecks, which entered into force on 14 April 2015, does not apply to any warship or other ship owned or operated by a State and used, for the time being, only on government non-commercial service, unless that State decides otherwise.

109. IAEA has worked with IMO to develop a safe regime for the environmentally sound recycling of ships, as encouraged by the General Assembly.[220] It also assisted IMO in developing recommendations on threshold levels of radioactive materials to be applied for the safe recycling of ships.[221]

110. *Ocean noise*. The General Assembly has noted the potential significant adverse impacts on living marine resources of ocean noise, affirmed the importance of sound scientific studies in addressing the issue, and encouraged further research, studies and consideration of those impacts.[222] In response, a number of organizations at the global and regional levels have continued to work towards improving knowledge of underwater noise and its impacts and sharing that information, including through workshops and publications.[223] Action plans, practical guidance and toolkits to minimize and mitigate the significant adverse impacts of anthropogenic underwater noise are under development.[224] A new indicator and a registry on impulsive noise, as well as an inventory of noise mitigation measures, have been developed at the regional level.[225] Ambient noise monitoring strategies have also been developed.[226]

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[216] IMO contribution and resolution 69/245, para. 210.
[217] IOPC Funds contribution.
[218] IMO contribution.
[219] Resolution 69/245, para. 143.
[220] Ibid., preamble and para. 205.
[221] IAEA contribution.
[222] Resolution 69/245, para. 237. See also www.un.org/depts/los/general_assembly/noise/noise.htm.
[223] Convention on Biological Diversity secretariat, HELCOM and IWC contributions.
[224] Ibid.
[225] OSPAR contribution.
[226] Ibid.

F. Management tools

111. The General Assembly has reaffirmed the need to improve cooperation and coordination at all levels, in accordance with the Convention, to support integrated management of the oceans and seas[227] (see para. 139 below). It has also consistently recognized the need for ecosystem approaches[228] and reaffirmed the need to develop and facilitate the use of diverse approaches and tools for conserving and managing marine biodiversity and ecosystems.[229]

112. *Environmental impact assessments and strategic environmental assessments.* At the core of the development of effective management measures is the knowledge gained through assessments of the impacts of various activities, projects and programmes on the marine environment, including cumulative impacts and their interaction with the ecosystem. In that regard, OSPAR is currently testing a methodology for assessing cumulative impacts.[230] In June 2015, the parties to the Antarctic Treaty reviewed the Guidelines for Environmental Impact Assessment in Antarctica.[231] Various sectors have also continued to assess the impacts of their activities and various threats to the marine environment, such as fisheries, oil spills and spills of hazardous substances.[232]

113. *Integrated approaches.* Cross-sectoral cooperation has increasingly taken place at both the global and regional levels (see, for example, paras. 82 and 92 above). In addition, a number of intergovernmental organizations have continued to facilitate the understanding and implementation of marine spatial planning as an integrated approach, including UNEP,[233] IOC[234] and the Convention on Biological Diversity secretariat.[235] Initiatives at the global[236] and regional levels[237] have also continued to promote the application of ecosystem approaches.

114. *Area-based management tools.* It has been reported that 3.4 per cent of the world's oceans are currently under protection.[238] The World Parks Congress developed recommendations to enhance marine conservation through marine protected areas and networks thereof.[239] In May 2015, IMO extended the eastern limit of the current Great Barrier Reef and Torres Strait Particularly Sensitive Sea Area to encompass the south-west part of the Coral Sea, and subsequently adopted associated protective measures in the form of new ship routeing measures.[240] At the regional level, efforts continued in relation to proposals on a representative system of marine protected areas in the Ross Sea Region and in East Antarctica, and to the

[227] Resolution 69/245, preamble.
[228] Ibid., preamble and paras. 200-202 and 230.
[229] Ibid., para. 226. See also paras. 223 and 225.
[230] OSPAR contribution.
[231] See host country communiqué on the outcomes of the XXXVIII Antarctic Treaty Meeting, available from www.ats.aq/devPH/noticia_completa.aspx?IdNews=120&lang=eng.
[232] See, for example, FAO, IAEA, OSPAR, CCAMLR and WCPFC contributions.
[233] UNEP contribution.
[234] IOC contribution.
[235] Convention on Biological Diversity secretariat contribution.
[236] See, for example, IWC contribution.
[237] See, for example, FAO, UNEP, CCAMLR, CPPS and OSPAR contributions.
[238] See UNEP and World Conservation Monitoring Centre, *Protected Planet Report 2014*.
[239] See http://worldparkscongress.org/about/promise_of_sydney_innovative_approaches.html.
[240] IMO contribution.

establishment of such areas in the Western Antarctic Peninsula.[241] The parties to the Antarctic Treaty discussed updates and improved arrangements for 17 Antarctic Protected Areas.[242] Marine protected areas currently cover about 12 per cent of the marine area of the Baltic Sea.[243] Seventy-seven marine protected areas were added to the OSPAR network, bringing the total number in the network to 413 (6 per cent of the total OSPAR area), 10 of which are beyond areas of national jurisdiction.[244]

VIII. Oceans and climate change and ocean acidification

115. The General Assembly has continued to emphasize the urgency of addressing the effects of climate change and ocean acidification on the marine environment and marine biodiversity, and recommended a number of actions,[245] including raising awareness of the adverse impacts of climate change on the oceans (see, for example, para. 142 below).

116. During the reporting period, the parties to the United Nations Framework Convention on Climate Change prepared the Paris climate agreement for adoption at the Paris Conference later in 2015.[246] IMO has also continued its work on further developing guidelines to assist in the implementation of the mandatory energy-efficiency regulations for international shipping.[247]

117. The Framework Convention on Climate Change structured expert dialogue on the 2013-2015 review of the adequacy of the long-term global goal of limiting global warming to below 2° above pre-industrial levels addressed key issues relating to the warming and acidification of oceans and the corresponding impacts on, for example, marine ecosystems, coastal zones, food security, livelihoods and sustainable development.[248]

118. A wide range of research activities are being carried out to study the impacts of climate change on oceans. For example, IOC-UNESCO established a working group to improve measurements needed to detect the impact of increasing CO_2 levels on marine life.[249] International meetings have also provided an opportunity to exchange information on the state of knowledge on climate change[250] and the latest developments in predicting changes in biodiversity, phenology, fisheries and ecosystems,[251] as well as to develop research strategies to provide guidance on what environmental changes, including harmful algae blooms, can be expected.[252]

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[241] CCAMLR contribution.

[242] See host country communiqué on the outcomes of the XXXVIII Antarctic Treaty Meeting, available from www.ats.aq/devPH/noticia_completa.aspx?IdNews=120&lang=eng.

[243] HELCOM contribution.

[244] OSPAR contribution.

[245] Resolution 69/245.

[246] United Nations Framework Convention on Climate Change secretariat contribution.

[247] IMO contribution.

[248] FCCC/SB/2015/INF.1 and United Nations Framework Convention on Climate Change secretariat contribution.

[249] IOC-UNESCO contribution.

[250] See www.commonfuture-paris2015.org.

[251] Third International Symposium on the Effects of Climate Change on the World's Oceans, www.pices.int/meetings/international_symposia/2015/2015-Climate-Change/scope.aspx.

[252] Symposium on Harmful Algal Blooms and Climate Change, www.pices.int/meetings/international_symposia/2015/2015-HAB/scope.aspx.

119. Scientific studies are also being conducted on the extent of ocean acidification.[253] For example, work is ongoing on coordinating and improving ocean observations to document the status and progress of ocean acidification.[254] An updated global ocean surface CO_2 map will be released in September 2015; it will provide crucial data enabling further research on ocean acidification.[255] OSPAR and the International Council for the Exploration of the Sea established an expert study group on ocean acidification, whose final report included a draft monitoring and assessment strategy.[256]

120. Other studies have focused on the impacts of climate change and ocean acidification and how to adapt to them, including impacts on marine biodiversity[257] and on the livelihoods and economies of coastal communities.[258] The Convention on Biological Diversity Subsidiary Body on Scientific, Technical and Technological Advice will be considering a work plan on biodiversity and acidification in cold-water corals areas at its twentieth meeting[259] (see also para. 86 above). UNEP is preparing a report on mesophotic reefs and their role in supporting the resilience of shallow reef habitat, in collaboration with GRID-Arendal.[260] The FAO-Adapt Framework Programme on Climate Change Adaptation is aimed at improving the resilience and adaptability of fisheries and aquaculture sectors to climate change and ocean acidification.

121. The specific challenges faced by small island developing States are also being studied (see also paras. 122-124 below). UNEP is developing a decision-support framework, being piloted for small island developing States, to enable planners to select, develop and implement appropriate policies and measures for coastal ecosystem-based adaptation.[261] WMO created a programme for small island developing States with the aim of consolidating its existing activities to support improved weather and climate services and increase the resilience of those States to extreme weather events and other adverse climate change impacts. At the United Nations Conference on Trade and Development (UNCTAD) Multi-year Expert Meeting on Transport, Trade Logistics and Trade Facilitation, in-depth consideration was given to some of the particular transport and trade logistics challenges that small island developing States face, including those arising from the impacts of climate variability.[262]

[253] WMO contribution.
[254] Global Ocean Acidification Observing Network at http://goa-on.org.
[255] Surface Ocean CO_2 Atlas (SOCAT version 3), see IOC-UNESCO contribution.
[256] See report, available from http://ices.dk/sites/pub/Publication%20Reports/Expert%20Group%20Report/acom/2014/SGOA/sgoa_finalOSPAR_2015.pdf.
[257] Convention on Biological Diversity secretariat, *An Updated Synthesis of the Impacts of Ocean Acidification on Marine Biodiversity*, available from www.cbd.int/doc/publications/cbd-ts-75-en.pdf; and http://unfccc.int/science/workstreams/the_2013-2015_review/items/6998.php.
[258] IAEA contribution.
[259] Convention on Biological Diversity secretariat contribution.
[260] UNEP contribution.
[261] Ibid.
[262] UNCTAD contribution.

IX. Supporting small island developing States and landlocked developing countries

122. *Small island developing States*. Oceans and their resources are of vital importance to small island developing States. As also highlighted in various other forums, the General Assembly has consistently recognized the particular vulnerabilities and capacity-building needs of those States.[263] In response, a number of activities have been undertaken or are under development to build the capacity of small island developing States in a number of areas, including weather and climate services (see also para. 121 above),[264] maritime transport and trade logistics,[265] coastal ecosystem-based adaptation[266] and sustainable financing of the conservation of critical fishery habitats.[267]

123. The topic of oceans and seas figured prominently at the Third International Conference on Small Island Developing States, held in September 2014. The outcome document, the SAMOA Pathway, set forth modalities for strengthened action on a range of challenges and priorities for small island developing States, including in relation to oceans, and coastal and marine resources.[268] A partnership between the Division and IOC-UNESCO was registered at the Conference and the corresponding development of regional training programmes is under way, with a first delivery intended particularly for Pacific small island developing States.[269]

124. The Framework for Pacific Regionalism, endorsed in July 2014, sets out a process to identify and implement regional priorities, based on the objectives of sustainable development.[270] The Pacific Ocean Alliance held its first meeting in May 2015 (see para. 91 above).[271] The Alliance, which is facilitated by the Pacific Ocean Commissioner, is an information-sharing and coordination mechanism to provide effective ocean policy coordination and implementation, facilitate regional cooperation for the high seas and explore emerging issues.[272]

125. *Landlocked developing countries*. The General Assembly continued to highlight the need for cooperation to address the development needs and challenges faced by land-locked developing countries.[273] Long delays in inland transport, customs and port handling procedures are common in developing countries, especially affecting those that are landlocked.[274] The full participation of landlocked developing countries in international trade continues to be negatively affected by high trade transaction costs, as well as inadequate physical transport infrastructure.[275]

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[263] Resolution 69/245, preamble and paras. 9, 14, 16, 17, 23-25, 32, 139, 203, 242 and 296.
[264] WMO contribution.
[265] UNCTAD contribution.
[266] UNEP contribution.
[267] PIFS contribution.
[268] Resolution 69/15, annex, paras. 53-58.
[269] See www.sids2014.org/partnerships.
[270] See www.forumsec.org/resources/uploads/embeds/file/Framework%20for%20Pacific%20Regionalism_booklet.pdf.
[271] PIFS contribution.
[272] Charter of the Pacific Ocean Alliance.
[273] See, for example, resolution 69/245, para. 288.
[274] See www.lldc2conference.org/.
[275] Ibid.

126. Measures have been adopted at a number of meetings to address the special needs and status of landlocked developing countries. The 2014 Vienna Programme of Action, the outcome document of the second United Nations Conference on Landlocked Developing Countries, seeks, inter alia, to promote unfettered, efficient and cost-effective access to and from the sea by all means of transport, on the basis of freedom of transit, and other related measures, in accordance with applicable international law, to reduce trade transaction costs, develop adequate transit transport infrastructure and effectively implement bilateral and international legal instruments and strengthen regional integration.[276] A 2015 informal stock-taking meeting on the second United Nations Conference on Landlocked Developing Countries deliberated on how the six priorities of the Vienna Programme of Action could be integrated into other processes, including the post-2015 development agenda, financing for development, and the climate change agenda.[277] A three-day follow-up meeting to the Conference adopted the Livingstone Call for Action for the Accelerated Implementation of the Vienna Programme of Action for Landlocked Developing Countries, on 4 June 2015.[278]

X. Building the capacity of States to implement the legal regime for the oceans and seas

127. The General Assembly has over the years consistently emphasized the need for building the capacity of States, in particular the least developed countries, small island developing States and coastal African States, to fully implement the Convention, benefit from the sustainable development of the oceans and seas and participate fully in global and regional forums on ocean affairs and the law of the sea.[279] That imperative is clearly expressed in the draft 2030 agenda for sustainable development and its related goals and targets.[280]

128. During the reporting period, a number of capacity-building activities were carried out that respond to the multiple requests made by the General Assembly, including in resolution 69/245. They included the delivery of training and the development of capacity-building tools to support the implementation of the Convention and other instruments in a number of sectors, examples of which are provided throughout the report and below.

129. *Implementation of the Convention and related instruments*. Through participation in various conferences, meetings, workshops and training events, the Division provided information, advice and assistance to States, intergovernmental organizations and others with a view to promoting a better understanding of the Convention and related agreements as the comprehensive regime which establishes rules governing all uses of the oceans and their resources, and to promoting wider acceptance, uniform and consistent application and effective implementation of that regime.[281]

[276] See www.lldc2conference.org/conference_details/francais-5-nov-2014-world-leaders-adopt-ambitious-10-year-action-plan-for-lldcs/.

[277] See www.lldc2conference.org/.

[278] See http://unohrlls.org/zambia_lldc_meeting_2015/.

[279] Resolution 69/245, part II, in particular para. 9.

[280] See, for example, A/69/L.85, goals 14.c and 17.9.

[281] A list of these activities is available on the Division's website at www.un.org/depts/los/reference_files/meetings.pdf.

130. The Division developed and delivered a two-day briefing in Mogadishu for parliamentarians of Somalia, with the aim of providing a better understanding of the Convention and related agreements (October 2014). It also organized a five-day in-depth workshop in Mogadishu for Somali Federal Government and regional officials on oceans and the law of the sea (July 2015). A related gap analysis of the Somali legislative and institutional frameworks is being undertaken. Those activities have been carried out under a project funded through the United Nations Trust Fund to Support Initiatives of States Countering Piracy off the Coast of Somalia. Furthermore, at the request of the Government of the Islamic Republic of Iran, the Division participated in a joint seminar on the Convention and related issues for lawmakers and academics, held in Tehran (May 2015).

131. In addition, with a view to supporting the implementation of the Convention in a multidisciplinary and cross-sectoral manner at the global level, the Division continued to implement two fellowships.

132. The Hamilton Shirley Amerasinghe Memorial Fellowship on the Law of the Sea has trained 30 individuals from 26 Member States since its establishment. Eric Teiniu (Solomon Islands) was awarded the 2015 Fellowship. Given the importance of the Fellowship, an appeal is made for voluntary contributions to the trust fund, as current funding will not allow for additional awards.

133. Since its establishment in 2004, the United Nations-Nippon Foundation Fellowship Programme has trained 110 individuals from 67 Member States. Currently, 10 individuals are undertaking their fellowships[282] and 10 new awards will be made in October 2015 for the 2016 cycle. Through the first Special Strategic Award, offered within the framework of the Fellowship Programme, a customized four-month programme is also being provided to a government official of Somalia. Under the alumni programme of the Fellowship Programme, a meeting marking the tenth anniversary of the Programme was hosted by the United Nations and The Nippon Foundation of Japan in November 2014 in Tokyo. The meeting brought together more than 80 alumni, as well as academic partners and high-level government and United Nations officials.

134. Capacity-building activities undertaken by other organizations have addressed, inter alia: maritime safety (see, for example, para. 22 above) and security (see, for example, paras. 47, 49, 50 and 54); maritime labour rights (see, for example, para. 32); sustainable development of oceans and seas (see, for example, paras. 61, 70, 77, 78, 83, 87 and 94-96); oceans and climate change and ocean acidification (see, for example, para. 121); small island developing States (see, for example, paras. 122 and 123); and capacities for the settlement of disputes under Part XV of the Convention (see para. 10).

135. Sustained financing to support ocean-related activities, including capacity-building initiatives, in support of the full implementation of the Convention is critical. The importance of financing across the sustainable development agenda, including those elements related to capacity-building and oceans, has been underlined in the draft 2030 agenda for sustainable development,[283] as well as in the Addis Ababa Action Agenda of the Third International Conference on Financing for

[282] The 2015 Fellows are from: Bangladesh, Brazil, the Cook Islands, Cuba, Georgia, Namibia, Nigeria, Peru, the Philippines and Tunisia.

[283] See, for example, A/69/L.85, paras. 41 and 63.

Development.[284] The latter directly addresses the capacity and financing for development nexus and stresses the importance of the conservation and sustainable use of the oceans and seas for sustainable development, and further reaffirms that international law as reflected in the Convention provides the relevant legal framework in this regard.[285]

136. The continued allocation of funding to projects relating to oceans and marine biodiversity through the sixth Global Environment Facility replenishment in April 2014 is a welcome step. However, while the implementation by developing countries of a number of multilateral agreements adopted in recent years has benefited from financial resources allocated through a specific financial mechanism as provided in such agreements, activities aimed at supporting the implementation of the Convention have remained dependent on voluntary contributions from States, intergovernmental organizations and donors, as well as bilateral cooperation. The situation deserves significant attention as it has negatively affected the extent, scale and sustainability of the assistance the Division and others can provide to developing States.

137. *Trust funds*. The Division administers eight voluntary trust funds.[286] In addition, it is in the process of establishing a new trust fund pursuant to General Assembly resolution 69/292 for the purpose of assisting developing countries, in particular the least developed countries, landlocked developing countries and small island developing States, in attending the meetings of the preparatory committee and intergovernmental conference on the development of an international legally binding instrument under the Convention on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction.[287]

138. It must be noted that, in recent years, the demand on the trust funds has increased, while the number and size of contributions have decreased significantly (see also para. 132 above). There is thus an acute need for contributions to ensure that the trust funds can continue to fulfil their mandates of supporting Member States.

XI. Strengthening international cooperation and coordination

139. The General Assembly, taking into account that the problems of ocean space are closely interrelated and need to be considered as a whole through an integrated, interdisciplinary and intersectoral approach, has continued to emphasize the importance of, and need to improve, cooperation and coordination at the national, regional and global levels, in accordance with the Convention, to support and supplement the efforts of each State in the implementation of the Convention. In that regard, it established the Informal Consultative Process to facilitate its work (see para. 59 above). Since 2000, the Consultative Process has considered a wide range of issues from the perspective of the three pillars of sustainable development.[288] It held its sixteenth meeting in April 2015, focusing on the timely topic of "Oceans

[284] Resolution 69/313, annex.
[285] Ibid., para. 64.
[286] See www.un.org/depts/los/reference_files/vol_t_funds.pdf.
[287] Resolution 69/292, para. 5.
[288] See www.un.org/Depts/los/consultative_process/consultative_process.htm.

and sustainable development: integration of the three dimensions of sustainable development, namely, environmental, social and economic".[289]

140. As indicated in the various sections of the present report, efforts have also continued to strengthen cooperation at the regional level. For example, in January 2015, Heads of State and Government of the African Union adopted Agenda 2063, which, inter alia, is aimed at the development of strategies to grow the African blue/ocean and green economies.[290] Subsequently, the Economic Commission for Africa Intergovernmental Committee of Experts of Eastern Africa held a meeting in March 2015 on the theme "Harnessing the blue economy for Eastern Africa's development".[291] On 25 July 2015, the African Union launched the Decade of African Seas and Oceans (2015-2025), and celebrated the first African Day of the Seas and Oceans.[292]

141. At the 16th Global Meeting of the Regional Seas Conventions and Action Plans, discussions focused on the role of the UNEP Regional Seas Programme in the post-2015 development agenda process, progress in the implementation of the Regional Seas Strategic Directions 2013-2016, marine litter (see para. 99 above) and a road map for implementing visioning priorities for the next 10 years.[293] With a general focus on ocean governance in Africa, the Abidjan Convention secretariat held the third meeting of the panel of experts on ocean governance in June 2015 (see also para. 91 above).

142. *UN-Oceans*. Under its revised terms of reference, as approved by the General Assembly,[294] and with a view to identifying possible areas for collaboration and synergy, UN-Oceans, the inter-agency coordination mechanism on oceans and coastal issues, continued to give priority attention to the development of an online searchable database for an inventory of mandates and activities. In conformity with its mandate, the Focal Point of UN-Oceans provided information on the work of UN-Oceans to the sixteenth meeting of the Informal Consultative Process.[295] With a view to providing information to States on UN-Oceans members' activities relating to oceans and climate change, and ocean acidification, UN-Oceans is planning to organize a side event at the forthcoming Conference of the Parties to the United Nations Framework Convention on Climate Change. A statement by the Focal Point of UN-Oceans had already been delivered both at the meeting of the Subsidiary Body for Scientific and Technical Advice of the Framework Convention on Climate Change[296] and at the event on the theme "Ocean and climate", organized by IOC-UNESCO in June 2015 to mark World Oceans Da[297]

[289] See A/70/78 and A/70/74.

[290] Assembly/AU/Dec.565(XXIV) and Assembly/AU/5(XXiV).

[291] www.uneca.org/stories/experts-antananarivo-call-policy-handbook-blue-economy.

[292] See http://pages.au.int/maritime/events/1st-african-day-seas-and-oceans-au-commission-hqs-addis-ababa-kickoff-decade-african.

[293] www.unep.org/regionalseas/globalmeetings/default_ns.asp.

[294] Resolution 68/70, annex.

[295] See www.unoceans.org.

[296] http://unfccc.int/files/meetings/bonn_jun_2015/application/pdf/un_oceans_statement_long_final_draft_rev_(3).pdf.

[297] http://legal.un.org/ola/media/info_from_lc/mss/speeches/MSS_UN_Oceans_statement_UNESCO_WOD-8-June-2015.pdf.

XII. Conclusions

143. As described in the present report, the activities carried out by the United Nations system and other intergovernmental organizations demonstrate a general responsiveness to the need for action in relation to the current key ocean issues identified in General Assembly resolution 69/245. Tangible progress has been made in relation to the implementation of specific provisions of that resolution, thus also confirming the important role of the General Assembly in stimulating concerted action on oceans and law of the sea issues.

144. Nonetheless, the health, resilience and productivity of the oceans have continued to deteriorate, as is confirmed by the summary of the first global integrated marine assessment of the Regular Process. As States are increasingly looking to the oceans to further develop their economies, most areas in the oceans are negatively affected by unsustainable activities taking place at sea or on land, compounded by the impacts of climate change and the effects of ocean acidification.

145. The oceans have also become a place of human suffering as a result of the dramatic increase in unsafe mixed migration by sea, underscoring the need for urgent action to prevent loss of life at sea, including by upholding the integrity of the search and rescue regime and ensuring the delivery of persons rescued at sea to a place of safety.

146. In addition, while it is generally recognized that there is a need to implement an integrated and cross-sectoral approach to the management of ocean activities, the focus has largely remained sectoral.

147. In facing those challenges, it will be necessary for the General Assembly, as the global institution having the competence to undertake an annual review of developments relating to ocean affairs and the law of the sea, to continue to provide firm guidance for effective action by States and other stakeholders. Its comprehensive annual resolutions on oceans and the law of the sea and on sustainable fisheries attest to the scope and complexity of the issues covered by its review and the progress it has achieved over time in addressing them. Most recently, the Assembly's consideration of the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction, through its Ad Hoc Open-ended Informal Working Group, led to the Assembly's adoption of a resolution on the development of an international legally binding instrument under the Convention on the issue. Furthermore, the entire draft of the first global integrated marine assessment has been completed and is now ready to be considered by the Ad Hoc Working Group of the Whole on the Regular Process. With regard to the impact of bottom fishing on vulnerable marine ecosystems, the Assembly has maintained under review the actions taken by States and regional fisheries management organizations and arrangements in response to specific provisions of its resolutions, with a view to ensuring effective implementation of the measures therein and to making further recommendations, where necessary.

148. In addition to existing processes, mechanisms and tools, the Assembly is best placed to foster an integrated, interdisciplinary and intersectoral approach to oceans and the law of the sea issues, as well as cross-sectoral cooperation and coordination, in accordance with the Convention. With respect to the draft 2030 sustainable development agenda, the General Assembly, as assisted by its processes on oceans, including the Informal Consultative Process, and inclusive of all relevant

stakeholders, could be a key contributor to the systematic follow-up and review of goal 14 and other ocean-related goals. Such review would include the progress made in meeting the commitment in goal 14 to enhance the conservation and sustainable use of the oceans and their resources by implementing international law, as reflected in the Convention, which provides the legal framework for the conservation and sustainable use of the oceans and their resources, as recalled in paragraph 158 of "The future we want".

149. The United Nations system remains ready to provide its support, including in the area of capacity-building, which is crucial for achieving sustainable development and for enabling developing countries to realize benefits from the oceans and their resources, in a sustainable manner and in accordance with the Convention.